

## SAE Handbook, Lesson RK. 7

# How Do You Analyze and Summarize Your Records?

### Unit. Record Keeping

### Problem Area. How Do You Analyze and Summarize Your Records?

#### Student Learning Objectives. **As a result of this lesson, the student will...**

1. Discuss the importance of conducting an annual record keeping analysis.
2. Perform a record keeping analysis.



#### Time

Instruction time for this lesson: 50 minutes



#### Resources

<http://www.cals.ncsu.edu/agexed/sae/toolbox/index.html>



#### Tools, Equipment and Supplies

Writing Surface  
Overhead Projector  
RK.7.TM.A&B  
RK.7.SA.A  
RK.7.Assess  
RK.7.PPT (There is also a PowerPoint presentation that contains the material from this lesson.)



#### Key Terms

The following terms are presented in this lesson and appear in bold italics:



## Interest Approach

*Tell the students the following joke:*

One day a farmer went into a hardware store and bought five hammers for \$10 apiece. A week later the farmer returned and bought five more hammers for \$10 apiece. The owner of the hardware store was curious but didn't say anything. A week later the farmer returned, and this time he bought 10 hammers for \$10 apiece. The owner of the hardware store could no longer contain his curiosity and asked the farmer what he was doing with all the hammers. The farmer replied that he was selling the hammers. So the hardware store owner asked how much the farmer was selling the hammers for. The farmer replied that he was getting \$5 a hammer. The hardware store owner was confused and asked the farmer if he knew he was losing money by selling the hammers for \$5. The farmer replied yes, but it beat farming. He was now losing less money than when he was farming.

## Summary of Content and Teaching Strategies

### **Objective 1: Discuss the importance of conducting an annual record keeping analysis.**

What is the point of the hammer joke? That you lose money by farming? No! Many farmers make a very comfortable living farming. The point of the story is that from time to time, you need to carefully analyze your records to see where you stand. The farmer knew he was losing money farming but was losing less money by selling hammers. Today we are going to learn about record keeping analysis

What is a record keeping analysis?

*Display RK.7.TM.A. Cover the bottom half.*

What is a Record Keeping Analysis?

- A process by which an individual carefully examines his/her financial records to determine the profitability and efficiency of his/her agricultural operations.
- A Record Keeping Analysis can also be performed on placement, agriscience research and other types of SAE records.

Why should one conduct a Record Keeping Analysis?

*Display the bottom half of RK.7.TM.A. and discuss.*

Why should one conduct a Record Keeping Analysis?

- To determine if the enterprise is making or losing money
- To see how the enterprise compares with other enterprises being conducted by the student
- To see how the enterprise compares to community or state averages
- To determine if management changes are needed
- To maximize profits by making needed changes
- To determine if different enterprises should be tried

If a person had an SAE that was not entrepreneurship, such as placement or an agriscience experiment, what are some factors that one might look at in analyzing the records?

*Display RK.7.TM.B*

Not Entrepreneurship??

If a person had an SAE that was not entrepreneurship, such as placement or an agriscience experiment, what are some questions that one might ask in analyzing the records?

Placement

- What skills have I learned?
- Are there other skills I need to learn?
- What knowledge have I gained?
- Is the pay appropriate for the work I do?
- Are the working conditions satisfactory?
- Are the hours I work appropriate?

Agriscience Research

- What have I learned?
- What skills have I developed?
- What are some additional skills or knowledge I need to learn?
- What can be done better?
- Other SAE Programs

Similar types of questions can be asked of other types of SAE programs.

## **Objective 2: Perform a record keeping analysis.**



We are now going to conduct a record keeping analysis. I will distribute a worksheet that has information on several students. You are to pair up and answer the questions on the worksheet. If you need help, raise your hand.

*Distribute RK.7.SA.A. Note the correct answers are shown below. After the student pairs complete the worksheet, go over the correct answers to make sure the students understand what they have done or collect the worksheets as the evaluation.*

## RK.7.SA.A

This page contains SAE information on four of the students in Ms. Price's agricultural class. They have just finished their SAE programs and are going to conduct a record keeping analysis. Read the information provided about each student's SAE program and then answer the questions. Use the data on the bottom of the next page for help in making the comparisons.

1. Herman had three acres of wheat. It cost him \$210 to grow the wheat. He harvested 177 bushels and sold the wheat for \$617.73  
What was the cost per acre to grow the wheat? \_\_\_\_\_ (\$70)  
What was the yield per acre? \_\_\_\_\_ (59 bushels)  
How much per bushel did the wheat sell for? \_\_\_\_\_ (\$3.49)  
Compared to the national averages, Herman's enterprise is (check one):  
\_\_\_\_ Worse than the National Average  
\_\_\_\_ Average  
\_\_\_\_ Better than the National Average (X)
2. Ronnie had five acres of corn. It cost him \$1,375 to grow the corn. He harvest 510 bushels and sold the corn for \$2.42 a bushel.  
What was the cost per acre to grow the corn? \_\_\_\_\_ (\$275)  
What was the yield per acre? \_\_\_\_\_ (102)  
How much in total did Ronnie get for his corn crop? \_\_\_\_\_ (\$1,234.20)  
Compared to the national averages, Ronnie's enterprise is (check one):  
\_\_\_\_ Worse than the National Average (X)  
\_\_\_\_ Average  
\_\_\_\_ Better than the National Average
3. Dianna had one acre of soybeans. She produced 34 bushels. It cost her \$119 to produce the soybeans. She sold the soybeans for \$5.57 a bushel.  
How much money did she make per acre? \_\_\_\_\_ (\$70.38)  
Compared to the national averages, Dianna's enterprise is (check one):  
\_\_\_\_ Worse than the National Average  
\_\_\_\_ Average (X)  
\_\_\_\_ Better than the National Average
4. Which of the above three students should consider trying a different crop or making changes to make the crop more profitable? Circle the correct answer.  
Herman                  Ronnie                  Dianna
5. Wanda is a new student in Ms. Price's agricultural class. Her uncle is willing to lease 10 acres of land to Wanda for crop production. Based upon past production records, the land can produce 60 bushels of soybeans per acre, 70 bushels of wheat per acre or 160 bushels of corn. If Wanda can grow each crop at the average cost per acre and can sell the crops for the average price received, which would be the most profitable, the 2<sup>nd</sup> most profitable and the 3<sup>rd</sup> most profitable? (Place a 1 beside the most profitable, a 2 beside the 2<sup>nd</sup> most profitable and 3 by the 3<sup>rd</sup> most profitable.)  
\_\_\_\_ Soybeans (1)  
\_\_\_\_ Wheat (3)  
\_\_\_\_ Corn (2)

## Production Averages for Selected Agricultural Enterprises

Crop	Average Price Received	Average Yield in Bushels per acre	Cost per Acre to Produce
Corn	\$2.42 a bushel	142	\$215
Soybeans	\$5.57 a bushel	34	\$119
Wheat	\$3.42 a bushel	42	\$76

Production figures came from:

<http://www.usda.gov/nass/>

[http://www.farmdoc.uiuc.edu/manage/enterprisecost\\_index.html](http://www.farmdoc.uiuc.edu/manage/enterprisecost_index.html)



### Review/Summary

Ask several students why a person should perform a record keeping analysis.



### Application

#### Extended Classroom Activity:

Have the students go to the National Agricultural Statistics Service website to see the type of data available that could help in a record keeping analysis. (<http://www.usda.gov/nass/>)

#### FFA Activity:

Have the students assume they are going to perform a record keeping-type analysis of the FFA. Develop three questions that could be asked.

#### SAE Activity:

Have students perform a record keeping analysis on their SAE records.

#### Evaluation:

Use RK.7.SA.A as the evaluation for this lesson.

#### Answers to Assessment:

Look under objective 2 for the answers to the Student Activity Sheet.

### What is a Record Keeping Analysis?

- A process by which an individual carefully examines his/her financial records to determine the profitability and efficiency of his/her agricultural operations.
- A Record Keeping Analysis can also be performed on placement, agriscience research and other types of SAE records. *(more later)*

### Why should one conduct a Record Keeping Analysis?

- To determine if the enterprise is making or losing money
- To see how the enterprise compares with other enterprises being conducted by the student
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- To determine if management changes are needed
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If a person had an SAE that was not entrepreneurship, such as placement or an agriscience experiment, what are some questions that one might ask in analyzing the records?

#### **Placement**

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- What knowledge have I gained?
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#### **Agriscience Research**

- What have I learned?
- What skills have I developed?
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What was the cost per acre to grow the corn? \_\_\_\_\_  
What was the yield per acre? \_\_\_\_\_  
How much in total did Ronnie get for his corn crop? \_\_\_\_\_  
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How much money did she make per acre? \_\_\_\_\_  
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